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NPDES FORM 6100-28



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460
ANNUAL REPORT FOR STORMWATER DISCHARGES ASSOCIATED WITH
INDUSTRIAL ACTIVITY UNDER THE NPDES MULTI-SECTOR GENERAL PERMIT

FORM Approved OMB No. 2040-0004

Permit Information

Report Year: 2020

Reporting Period: 1/1/2020 to 12/31/2020

NPDES ID: MAR053284

**Facility Information** 

Facility Name: SCHNITZER NORTHEAST

Facility Point of Contact

First Name Middle Initial Last Name: Keri Fitzpatric

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## **Facility Mailing Address**

Address Line 1: 69 ROVER STREET

Address Line 2: City: EVERETT

ZIP/Postal Code: 02149 State: MA

County or Similar Division: Middlesex

## General Findings

Provide a summary of your past year's routine facility inspection documentation (see Part 3.1.2 of the permit). In addition, if you are an operator of an airport facility (Sector S) that is subject to the airport effluent limitations guidelines, and are complying with the MSGP Part 8.S.8.1 effluent limitation through the use of non-urea-containing deicers, provide a statement certifying that you do not use pavement deicers containing urea (e.g., "Urea was not used at [name of airport] for pavement deicing in the past year and will also not be used in 2015." (Note: Operators of airport facilities that are complying with Part 8.S.8.1 by meeting the numeric effluent limitation for ammonia do not need to include this statement.)

Facility inspections included evaluations during wet and dry weather conditions. Facility inspections generally identified h ousekeeping deficiencies including partially clogged pipes, outdoor storage of petroleum, and accumulated solids in stormwater infrastructure. Additionally, the cover of the stormwater conveyance trench at the front entrance and exit was broken.

Provide a summary of your past year's quarterly visual assessment documentation (see Part 3.2.2 of the permit).

During each quarterly sampling event, the quarterly visual inspection identified a sulfur odor.

For any four-sample (minimum) average benchmark monitoring exceedance, if after reviewing the selection, design, installation, and implementation of your control measures and considering whether any modifications are necessary to meet the effluent limits in the permit, you determine that no further pollutant reductions are technologically available and economically practicable and achievable in light of best industry practice, provide your rationale for why you believe no further reductions are achievable (see Part 6.2.1.2 of the permit). Enter "NA" if not applicable.

Since the installation of the augmented stormwater treatment (electrocoagulation) at the facility in late 2016, the concentr ation of Chemical Oxygen Demand (COD) in the quarterly stormwater samples collected in 2017, 2018, 2019, and 2020 have consi stently been detected at concentrations greater than the benchmark concentration. The average concentration of COD in 2020 was 380 mg/L and the benchmark is 120 mg/L. This is consistent with the average concentrations reported since 2017. In 201 7, Prolerized New England Company worked with the stormwater design engineer, Woodard & Curran and the stormwater treatment system manufacturer, Watertectonics, to identify the source of COD exceedances. Investigation activities included inspectio n of treatment system media, replacement of virgin carbon with coconut carbon, additional laboratory analysis, review of ava ilable literature, and discussions with lab personnel. Several components of the facility's stormwater infrastructure is loc ated in a tidally influenced area and water from the adjacent brackish Mystic River is entering the stormwater system at pip e joints from the original stormwater infrastructure during high tide. As such, the stormwater has an elevated concentratio n of chlorides. The elevated concentrations of chlorides in the samples are interfering with the COD lab analysis. Proleri zed New England Company contracted with Inland Waters to investigate and seal several of the pipe joints in August 2016. Inf iltration of brackish water continued to be observed in 2017 and was believed to be entering the stormwater system via the n ew hydrodynamic separator. The manufacturer of the hydrodynamic separator investigated the structure in April 2018 and foun d the structure to be sealed. The infiltration is likely occurring around the original pipe joints that were sealed in 2016 due to continued hydrostatic pressure. The infiltration generally occurs when tides are greater than 12 feet, which is infr equent. Since the lab analysis is impacted by the brackish water that gets into the on-site stormwater tank, no corrective actions are planned to address COD.

In 2020, zinc was detected at an average concentration of 0.1747 mg/L which is above the benchmark concentration of 0.09 mg/L. This is the first time since the installation of the stormwater treatment system that the average concentration of zinc has exceeded the benchmark concentration. A carbon change out was performed on January 8, 2021 and the concentration of zinc will continue to be monitored during future sampling events.

Provide a summary of your past year's corrective action documentation (See Part 4.4 of the permit). (Note: If corrective action is not yet completed at the time of submission of this annual report, you must describe the status of any outstanding corrective action(s).) Also describe any incidents of noncompliance in the past year or currently ongoing, or if none, provide a statement that you are in compliance with the permit.

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In 2020 the average concentration of copper was 0.0442 mg/L compared to a benchmark concentration of 0.0048 mg/L. During two of the sampling events, the method detection limits (0.010 mg/L and 0.02000 mg/L) for copper was above the benchmark concentration of 0.0048 mg/L. Copper was not detected above the method detection limit but since the detection limit is greater than the benchmark concentration there is a possibility the concentration of copper exceeds the benchmark concentration. The laboratory has reported the elevated detection limit is due to the elevated concentration of sodium (chlorides) in the sample. PNE will continue to monitor the concentrations of copper in stormwater during future monitoring events and work with the laboratory to achieve method detection limits at or below benchmark concentrations.

In 2020, zinc was detected at an average concentration of 0.1747 mg/L which is above the benchmark concentration of 0.09 mg/L. This is the first time since the installation of the stormwater treatment system that the average concentration of zinc has exceeded the benchmark concentration. Based on the average zinc concentration and the above average concentrations of a luminum and iron detected in the December 2020 sample, a carbon change out was performed on January 8, 2021. Stormwater qu ality, particularly zinc will continue to be monitored during future sampling events.

Corrective actions in 2020 generally consisted of housekeeping improvements including solid waste management, waste management improvements, removal of accumulated solids from stormwater structures, and replacement of the stormwater conveyance trench at the front entrance and exit.

## **Certification Information**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I have no personal knowledge that the information submitted is other than true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Certified By: Keri A. Beck

**Certifier Title:** 

Certifier Email: kfitzpatrick@schn.com

Certified On: 01/28/2021 4:49 PM ET